

Abstract

Device for the optimization of hydraulically controlled engagement of clutches used in marine transmissions

Subject-matter of the present invention is a device for the optimization of hydraulically controlled engagement of clutches used in marine transmissions.

This device comprises pumps (10) for the delivery of hydraulic fluid from a reservoir (11) to two control pistons (12a, 12b) of said clutches, two solenoid valves (13, 14) arranged between said pumps (10) and said pistons (12a, 12b), a bistable valve (15) arranged in parallel between said solenoid valves (13, 14) and said pistons (12a, 12b), a control valve (16) arranged on the pressure side of said pumps (10) toward the discharge line leading to the reservoir (11) and equipped with an adjusting device (17), whose spring element (18) is linked to said bistable valve (15).

The device is characterized in that it comprises a shuttle-type sequence valve (19) for the link between the spring element (18) of said adjusting device (17) and the supply line of said solenoid valves (13, 14) or said bistable valve (15), whereby the bistable valve is also linked to the hydraulic control (20) of said sequence valve (19), and whereby a preset pressure drop is produced between the spring element (18) of said adjusting device (17) and the bistable valve (15), and said adjusting device (17) is linked to the pressure side of said pumps (10).